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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,717	12/29/2003	Petteri Annamaa	01329/0200594-US0	2122
7278	7590	03/09/2006	EXAMINER	
DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257			WIMER, MICHAEL C	
			ART UNIT	PAPER NUMBER
			2828	

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marqvardsen et al. (WO 00/38475) in view of Mahringer (WO 02/50944).

Regarding claims 1 and 9, Marqvardsen et al. show in Figures 2-5, an arrangement for a portable radio/phone with a planar antenna 1 and speaker mounted to the cavity of the antenna. No electrical feeders or conductors are shown for the antenna and speaker. However, a skilled artisan would have found it obvious to provide conductors, either one or two, for feeding the antenna and connecting the audio amplifier to the speaker, with either one or two conductors. Mahringer is cited as evidence of obviousness and as showing a conductor 5 employed to connect the speaker. The other speaker lead is connected to ground. Since the antenna 1 shares a ground, and the antenna 1 in Marqvardsen also shares a ground connection through the cavity structure, at least one conductor is galvanically connected in the speaker and antenna, in common. It would have been obvious to employ the antenna structure taught in Mahringer, such as a PIFA, where a planar antenna element is disposed above a ground plane, in lieu of the antenna in Marqvardsen.

***Allowable Subject Matter***

3. Claim 10 is allowed.
4. Claims 2-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

5. Applicant's arguments filed 12/21/2005 have been fully considered but they are not persuasive. Specifically, leads for connecting the speaker and antenna elements, separately or in combination are obvious circuit conductors for providing signals. One lead of a speaker pair is connected to ground and a skilled artisan would have found such a connection obvious. Similarly, antenna conductors with at least one ground conductor are also used for feeding. Ground conductors are employed to connect the antenna and speaker to respective RF and audio frequency amplifiers. The rejection stands.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wimer whose telephone number is (571) 272-1833. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun O. Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael C. Wimer  
Primary Examiner  
Art Unit 2828

MCW  
2/24/2006